

Prunus virginiana. Scasacralb. Cerisier à grappe.

(Perhaps a corruption of the European name, which, according to Provancher, is also used in Quebec.)

Crataegus. Esnils. Épine.

(In Quebec called Senellier.) (Éspine)

Carum Carui. Aneine. Carvi.

(In Quebec called *Anis* des Vosges. The name *anis*, in France, however, refers to *Pimpinella Anisum*.)

Aralia nudicaulis. La Patoie.

(Probably *Patte d'oie* in reference to the leaf-habit of the plant.)

Viburnum Opulus. Pabina. Viorne.

(In Quebec, Pimbina.)

Vaccinium. Bluet. Airelle.

(In France this name is applied to *Centaurea Cyanus*.)

The following common plants have retained in Madawaska the names applied to them in France: *Populus tremuloides*, Tremble; *Alnus*, l'Aune; *Trifolium*, Trèfle; *Acer*, l'Érable; *Taraxacum officinale*, Pissenlit.

ON THE PLANTS INTRODUCED BY MINOT PRATT AT CONCORD, MASSACHUSETTS.

THERE have undoubtedly been many attempts to enrich floras of particular places by the artificial introduction of attractive plants from other regions. But most efforts of this kind have been sporadic, short-lived, and relatively futile. The nice adjustment which exists in every native vegetation as the result of long competition and jostling of its components can rarely be disturbed to advantage by human agency. If a new plant is introduced one of three not easily predicted results is sure to ensue. The species may find congenial conditions, withstand the competition of the native plants, and quickly increase so that it becomes in some instances a noxious weed, displacing portions of the indigenous vegetation. On the other hand it may, and usually does, fail to make headway against its acclimated neighbors, it thrives only while under artificial protection, and when left to shift for itself gradually decreases both in the number and vigor of the individuals until it

disappears altogether. The third case, although the one usually desired, is, alas, rarely attained, namely an adjustment of the flora by which the new element takes what may be styled a normal place in the vegetation, the planted individuals not only holding their own, but propagating themselves so that the species becomes diffused over a more or less considerable area without any such inordinate multiplication as would displace an appreciable part of the native flora.

The chance of obtaining this unusual result is so slight that such experiments are looked upon by botanists, in general, with suspicion if not disapproval. The matter is primarily one of horticulture rather than of botany, and to the botanist the problem of what can be made to grow in a given region is never of so much interest as the question what has, in the long struggle for existence, succeeded in growing there of itself.

However, the efforts of the late Minot Pratt to enrich the flora of Concord, were conducted with so much care, skill, and patience, extending over a long period of years and concerning a considerable variety of plants, that their results have a high degree of interest for the local botanist.

It was Mr. Pratt's custom to obtain several or, if possible, many thrifty individuals of a species not indigenous about Concord, but apparently suited to its climate. These he would set out at various points about Concord, in conditions of soil, moisture, and exposure which most nearly approximated those of their original occurrence. The species chosen were mostly those of the northern states from Vermont to Illinois, and were usually selected for their attractive flowers, such as *Claytonia*, *Sabbatia*, *Dodecatheon*, or for their interesting or economic qualities, such as *Camptosorus*, *Aralia quinquefolia*, etc. These efforts extended over many years from perhaps 1860 to 1875, and the plants were frequently visited and carefully tended while getting a start. For some twenty years, however, they have been practically left to themselves. Fortunately Mr. Pratt kept a record of most if not all of these introductions, the manuscript being in the Concord library.

The treatment of these species in local floras has naturally presented a somewhat awkward problem. It is known that many of them have occurred and some still persist in a practically "wild" state, so much so, in fact, that collectors who have come upon them, have sometimes insisted that they were "truly indigenous." Nearly all are

mentioned in Dame & Collins' Flora of Middlesex County, but with little data as to their relative abundance, and in some cases without much assurance that they were persisting at all.

With a hope of placing on record the actual although to some extent disappointing results of Mr. Pratt's work, and reducing the plants concerned to as definite a status as possible, we have applied for information to Mr. Alfred W. Hosmer, whose long and close familiarity with the flora of Concord permits him to speak with much authority upon these plants. Mr. Hosmer has most kindly sent the following lists, the first showing twenty-four species which have persisted through the last twenty or more years, and the second indicating those species which are said to have been introduced by Mr. Pratt, but now thought to be entirely extinct in the region. Considering Mr. Hosmer's well-known and intensive exploration of the Concord flora, we have no hesitation in recommending that plants of the latter list be hereafter omitted from local floras of the region, since they have had only a brief and horticultural relation to the vegetation of Concord.

PLANTS KNOWN TO HAVE BEEN INTRODUCED BY MINOT PRATT AND PERSISTING IN RECENT YEARS :

ALFRED W. HOSMER.

Hepatica acutiloba, DC., one station, spreading.

Xanthorrhiza apiifolia, L'Her., one station in the Esterbrook woods, spreading. Mr. Pratt's record says "Plant found on Monument street, 1870; propagated and set out on Mill brook."

Caulophyllum thalictroides, Michx., one station.

Dicentra Cucullaria, DC., one station, but spreading.

Viola rotundifolia, Michx., a few plants left.

Claytonia Virginica, L., spreading somewhat.

Oxalis Acetosella, L., spreading.

Acer spicatum, Lam., growing finely.

Potentilla tridentata, Ait., spreading somewhat.

Tiarella cordifolia, L., two stations, spreading.

Dodecatheon Meadia, L., one station.

Sabbatia chloroides, Pursh, one station, barely holding its own. Two stations have disappeared within five years.

Pogonatum giganteum, Dietrich, spreading.

Cypripedium pubescens, Willd., three plants only.

Iris cristata, Ait., a single station, at which last year the plant was nearly extinct, but this year again growing well.

Convallaria majalis, L., three stations, spreading.

Trillium nivale, Pursh, spreading.

Trillium grandiflorum, Salisb., only two or three plants left.

Abies balsamea, Marsh., three or four trees on Ponkawtasset.

Thuja occidentalis, L., like the preceding.

Asplenium angustifolium, Michx., one station.

Camptosorus rhizophyllus, Link, three stations.¹

Aspidium Goldianum, Hook., spreading.

Cystopteris bulbifera, Bernh., two stations.

PLANTS SET OUT BY MR. PRATT WHICH HAVE NOT BEEN FOUND IN RECENT YEARS :

ALFRED W. HOSMER.

<i>Ranunculus Pennsylvanicus</i> , L. f.	<i>Boltonia asteroides</i> , L'Her.
<i>Isopyrum biternatum</i> , Torr & Gray.	<i>Silphium laciniatum</i> , L.
<i>Draba arabisans</i> , Michx.	<i>Silphium terebinthinaceum</i> , L.
<i>Viola rostrata</i> , Muhl.	<i>Coreopsis trichosperma</i> , Michx.
<i>Viola striata</i> , Ait. ²	<i>Helenium autumnale</i> , L.
<i>Viola Canadensis</i> , L.	<i>Onopordon acanthium</i> , L.
<i>Viola cornuta</i> , L.	<i>Lobelia syphilitica</i> , L.
<i>Petalostemon violaceus</i> , Michx.	<i>Vaccinium Vitis-Idaea</i> , L.
<i>Geum triflorum</i> , Pursh.	<i>Periploca Graeca</i> , L.
<i>Dalibarda repens</i> , L.	<i>Hydrophyllum Virginicum</i> , L.
<i>Mitella diphylla</i> , L. ³	<i>Symphytum officinale</i> , L.
<i>Ribes Cynosbati</i> , L.	<i>Mertensia Virginica</i> , DC.
<i>Aralia quinquefolia</i> , Gray.	<i>Calamintha Clinopodium</i> , Benth.
<i>Sambucus racemosa</i> , L.	<i>Lophanthus anisatus</i> , Benth.
<i>Eupatorium ageratoides</i> , L.	<i>Dirca palustris</i> , L.
<i>Liatris spicata</i> , Willd.	<i>Parietaria Pennsylvanica</i> , Muhl.
<i>Solidago squarrosa</i> , Muhl.	<i>Orchis spectabilis</i> , L.
<i>Solidago tenuifolia</i> , Pursh.	<i>Habenaria obtusata</i> , Richards.

¹ *Podophyllum peltatum*, L., *Oxalis violacea*, L., *Monarda didyma*, L., and *Asarum Canadense*, L., are believed to have been established at Concord prior to Mr. Pratt's work, although he may have transplanted some individuals. All these species are thriving and spreading at their Concord stations.

² Again set out by other persons within five years.

³ Not found since 1893.

<i>Habenaria dilatata</i> , Gray.	<i>Uvularia grandiflora</i> , Smith.
<i>Cypripedium arietinum</i> , R.Br.	<i>Streptopus amplexifolius</i> , DC.
<i>Cypripedium spectabile</i> , Sw.	<i>Trillium sessile</i> , L.
<i>Cypripedium parviflorum</i> , Salisb.	

AN EASY METHOD OF PROPAGATING *DROSERA FILIFORMIS* (Plate 8.) — While cultivating *Drosera filiformis*, Raf., for experimental work I learned, quite by accident, that the quickest way to obtain new plants is by making cuttings. I grow all my *Drosera* species in a greenhouse where the temperature is kept low. At some time or other parts of the leaves of *Drosera filiformis* were broken off and allowed to lie on the sand where they fell. In the course of a few weeks these parts were observed to be giving off young plants at close intervals. This method of obtaining new plants may prove valuable to botanists who are far removed from the habitat of *Drosera filiformis*, and wish to keep a large supply of the species in a living state for experimental purposes. *Drosera intermedia* var. *Americana*, *D. rotundifolia*, and *D. binata* will also give off new plants if leaves are placed on sand or moss. *D. rotundifolia* has been reported (Bull. Torr. Club, 1892, p. 295) with young plants growing out of its leaves, and I have seen specimens of a similar kind collected in late July. It would seem that this species, at least, has a tendency to propagate itself naturally by other means than seed. Whether *D. filiformis* and *D. binata* do the same in a wild state I am unable to say, although it seems highly probable. — OAKES AMES, North Easton, Mass.

EXPLANATION OF PLATE 8. — *Drosera intermedia*, var. *Americana*: figs. A and B, young plants growing from the leaves; fig. F, longitudinal section of one of the young plants at point of origin. *D. filiformis*: figs. C and D, portions of leaves with young plants springing from them; fig. G, longitudinal section of a small plant and cross section of leaf from which it springs. *D. binata*: fig. E, part of leaf showing young plants. All figures enlarged.

VACCINIUM ULIGINOSUM AT A LOW ALTITUDE. — Some time ago I came across a large patch of *Vaccinium uliginosum*, growing at an altitude of three or four hundred feet in the town of Farmington, Maine. This species, generally found in the eastern states only on the alpine summits of New England and New York, seemed as much at home at this lowland station as if it had been at a much higher altitude. The leaves